

ANNUAL SYNAR REPORT

42 U.S.C. 300x-26

OMB № 0930-0222

FFY 2023

State: TN

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INTRODUCTION

The Annual Synar Report (ASR) format provides the means for states to comply with the reporting provisions of the Public Health Service Act (42 U.S.C. 300x-26) and the Tobacco Regulation for the Substance Abuse Prevention and Treatment Block Grant (SABG) (45 C.F.R. 96.130 (e)).

How the Synar report helps the Center for Substance Abuse Prevention

In accordance with the tobacco regulations, states are required to provide detailed information on progress made in enforcing youth and young adult tobacco access laws (FFY 2022 Compliance Progress) and future plans to ensure compliance with the Synar requirements to reduce youth and young adult tobacco access rates (FFY 2023 Intended Use Plan). These data are required by 42 U.S.C. 300x-26 and will be used by the Secretary to evaluate state compliance with the statute. Part of the mission of the Center for Substance Abuse Prevention (CSAP) is to assist states¹ by supporting Synar activities and providing technical assistance helpful in determining the type of enforcement measures and control strategies that are most effective. This information is helpful to CSAP in improving technical assistance resources and expertise on enforcement efforts and tobacco control program support activities, including state Synar program support services, through an enhanced technical assistance program involving conferences and workshops, development of training materials and guidance documents, and onsite technical assistance consultation.

How the Synar report can help states

The information gathered for the Synar report can help states describe and analyze substate needs for program enhancements. These data can also be used to report to the state legislature and other state and local organizations on progress made to date in enforcing youth and young adult tobacco access laws when aggregated statistical data from state Synar reports can demonstrate to the Secretary the national progress in reducing youth and young adult tobacco access problems. This information will also provide Congress with a better understanding of state progress in implementing Synar, including state difficulties and successes in enforcing retailer compliance

¹The term “state” is used to refer to all the states and territories required to comply with Synar as part of the Substance Abuse Prevention and Treatment Block Grant Program requirements (42 U.S.C. 300x-64 and 45 C.F.R. 96.121).

with youth and young adult tobacco access laws.

Getting assistance in completing the Synar report

If you have questions about programmatic issues, you may call CSAP's Division of Primary Prevention at (240) 276-2550 and ask for your respective State Project Officer, or contact your State Project Officer directly by telephone or email. If you have questions about fiscal or grants management issues, you may call your Grants Management Specialist in the Office of Financial Resources, Division of Grants Management, at (240) 276-1422.

Where and when to submit the Synar report

The ASR must be received by SAMHSA no later than December 31, 2022 and must be submitted in the format specified by these instructions. Use of the approved format will avoid delays in the review and approval process. The chief executive officer (or an authorized designee) of the applicant organization must sign page one of the ASR certifying that the state has complied with all reporting requirements.

The state must upload one copy of the ASR using the online WebBGAS (Block Grant Application System). In addition, the following items must be uploaded to WebBGAS:

- FFY 2023 Synar Survey Results: States that use the Synar Survey Estimation System (SSES) must upload one copy of *SSES Tables 1–8* (in Excel) to WebBGAS. **Please note that, in the FFY 2023 ASR, SSES will generate Tables 6, 7, and 8, which are based on the optional microdata on product type, retail outlet type, and whether identification was requested. If your state does not submit these optional data, Tables 6, 7, and 8 will be blank. Tables 6, 7, and 8 are generated for the convenience of the state, and states are not required to submit completed versions of Tables 6, 7, or 8.** States that do not use SSES must upload one copy of ASR Forms 1, 4, and 5, and Forms 2 and 3, if applicable, (in Excel), as well as a database with the raw inspection data to WebBGAS.
- Synar Inspection Form: States must upload one blank copy of the inspection form used to record the result of each Synar inspection.
- Synar Inspection Protocol: States must upload a copy of the protocol used to train inspection teams on conducting and reporting the results of the Synar inspections. This document should be different than the Appendix C attached to the Annual Synar Report.
- A scanned copy of the signed Funding Agreements/Certifications

Each state SSA Director has been emailed a login ID and password to log onto the Synar section of the WebBGAS site.

FFY 2023: FUNDING AGREEMENTS/CERTIFICATIONS

The following form must be signed by the Chief Executive Officer or an authorized designee and submitted with this application. Documentation authorizing a designee must be attached to the application.

PUBLIC HEALTH SERVICES ACT AND SYNAR AMENDMENT
42 U.S.C. 300x-26 requires each state to submit an annual report of its progress in meeting the requirements of the Synar Amendment and its implementing regulation (45 C.F.R. 96.130) to the Secretary of the Department of Health and Human Services. By signing below, the chief executive officer (or an authorized designee) of the applicant organization certifies that the state has complied with these reporting requirements and the certifications as set forth below.
SYNAR SURVEY SAMPLING METHODOLOGY
The state certifies that the Synar survey sampling methodology on file with the Center for Substance Abuse Prevention and submitted with the Annual Synar Report for FFY 2023 is up-to-date and approved by the Center for Substance Abuse Prevention.
SYNAR SURVEY INSPECTION PROTOCOL
The state certifies that the Synar Survey Inspection Protocol on file with the Center for Substance Abuse Prevention and submitted with the Annual Synar Report for FFY 2023 is up-to-date and approved by the Center for Substance Abuse Prevention.
State: Tennessee
Name of Chief Executive Officer or Designee: Marie Williams
Signature of CEO or Designee:
Title: Commissioner Date Signed:
If signed by a designee, a copy of the designation must be attached.

SECTION I: FFY 2022 (Compliance Progress)**YOUTH AND YOUNG ADULT ACCESS LAWS, ACTIVITIES, AND ENFORCEMENT**

42 U.S.C. 300x-26 requires the states to report information regarding the sale/distribution of tobacco products to individuals under age 21.

- 1. Please indicate any changes or additions to the state tobacco statute(s) relating to youth and young adult access since the last reporting year. If any changes were made to the state law(s) since the last reporting year, please upload a copy of the state law to WebBGAS. (see 42 U.S.C. 300x-26).**

- a. Has there been a change in the minimum sale age for tobacco products?**

☐ Yes ☒ No

If Yes, current minimum age: ☐ 19 ☐ 20 ☐ 21

- b. Have there been any changes in state law that impact the state's protocol for conducting Synar inspections?**

☐ Yes ☒ No

If Yes, indicate change. (Check all that apply.)

- ☐ Changed to require that law enforcement conduct inspections of tobacco outlets
☐ Changed to make it illegal for youth and young adults to possess, purchase or receive tobacco
☐ Changed to require ID to purchase tobacco
☐ Changed definition of tobacco products
☐ Other change(s) (Please describe.) _____

- c. Have there been any changes in state law that impact the following?**

Licensing of tobacco vendors ☐ Yes ☒ No

Penalties for sales to minors ☐ Yes ☒ No

Vending machines ☐ Yes ☒ No

Added product

categories to youth and young adult access law ☐ Yes ☒ No

- 2. Describe how the Annual Synar Report (see 45 C.F.R. 96.130(e)) was made public within the state prior to submission of the ASR. (Check all that apply.)**

☐ Placed on file for public review

☒ Posted on a state agency Web site (Please provide exact Web address and the date when the FFY 2023 ASR was posted to this Web address.)

Web address: _____

Date published: _____

☐ Notice published in a newspaper or newsletter

- ☐ Public hearing
- ☐ Announced in a news release, a press conference, or discussed in a media interview
- ☐ Distributed for review as part of the SABG application process
- ☐ Distributed through the public library system
- ☐ Published in an annual register
- ☐ Other (Please describe.) _____

3. Identify the following agency or agencies (see 42 U.S.C. 300x-26 and 45 C.F.R. 96.130).

a. The state agency(ies) designated by the Governor for oversight of the Synar requirements:

The Tennessee Department of Mental Health and Substance Abuse Services (TDMHSAS) is responsible for SAPT Block Grant requirements which include Synar. The Tennessee Department of Agriculture (TDA) is mandated to enforce youth access laws. TDMHSAS has a contractual agreement for TDA to conduct Synar Surveys.

Has this changed since last year's Annual Synar Report?

☐ Yes ☒ No

b. The state agency(ies) responsible for conducting random, unannounced Synar inspections:

Tennessee Department of Agriculture

Has this changed since last year's Annual Synar Report?

☐ Yes ☒ No

c. The state agency(ies) responsible for enforcing youth and young adult tobacco access law(s):

Tennessee Department of Agriculture

Has this changed since last year's Annual Synar Report?

☐ Yes ☒ No

4. Identify the following agencies and describe their relationship with the agency responsible for the oversight of the Synar requirements.

a. Identify the state agency responsible for tobacco prevention activities (the agency that receives the Centers for Disease Control and Prevention's National Tobacco Control Program funding).

Tennessee Department of Health

b. Has the responsible agency changed since last year's Annual Synar Report?

☐ Yes ☒ No

c. Describe the coordination and collaboration that occur between the agency

responsible for tobacco prevention and the agency responsible for oversight of the Synar requirements. (Check all that apply.) The two agencies

- ☐ Are the same
- ☐ Have a formal written memorandum of agreement
- ☒ Have an informal partnership

The Tennessee Department of Mental Health and Substance Abuse Services (TDMHSAS) works with the Tennessee Department of Health (TDH) on planning and training. TDH has included the reduction of the Synar rate as a goal for their tobacco prevention efforts and the tobacco coordinators around the state have worked to distribute merchant education toolkits. In addition, at the community level, TDMHSAS funded coalitions have assisted TDH's Health Councils to plan and implement tobacco prevention activities that are based on public model.) TDMHSAS is responsible for SAPT Block Grant requirements which include Synar. The Department of Agriculture (TDA) is mandated to enforce youth access laws. TDMHSAS has a contractual agreement with TDA to contract Synar Surveys. During tobacco compliance inspections involving youth, the laws are enforced on a state and federal level.

- ☐ Conduct joint planning activities
- ☐ Combine resources
- ☐ Have other collaborative arrangement(s) (Please describe.) _____
- ☐ No relationship

d. Does a state agency contract with the Food and Drug Administration's Center for Tobacco Products (FDA/CTP) to enforce the youth and young adult access and advertising restrictions in the Family Smoking Prevention and Tobacco Control Act?

- ☐ Yes ☒ No (if no, go to Question 5)

e. If yes, identify the state agency responsible for enforcing the youth and young adult access and advertising restrictions in the Family Smoking Prevention and Tobacco Control Act (the agency that is under contract to the Food and Drug Administration's Center for Tobacco Products (FDA/CTP)).

f. Has the responsible agency changed since last year's Annual Synar Report?

- ☐ Yes ☐ No

g. Describe the coordination and collaboration that occur between the agency contracted with the FDA to enforce federal youth and young adult tobacco access laws and the agency responsible for oversight of the Synar requirements. (Check all that apply.) The two agencies:

- ☐ Are the same
- ☐ Have a formal written memorandum of agreement
- ☐ Have an informal partnership
- ☐ Conduct joint planning activities
- ☐ Combine resources
- ☐ Have other collaborative arrangement(s) (*Please describe.*):

- ☐ No relationship

h. Does the state use data from the FDA enforcement inspections for Synar survey reporting?

- ☐ Yes ☐ No

5. Please answer the following questions regarding the state's activities to enforce the state's youth and young adult access to tobacco law(s) in FFY 2022 (*see 42 U.S.C. 300x-26 and 45 C.F.R. 96.130(e)*).

a. Which one of the following describes the enforcement of state youth and young adult access to tobacco laws carried out in your state? (*Check one category only.*)

- ☐ Enforcement is conducted exclusively by local law enforcement agencies.
- ☐ Enforcement is conducted exclusively by state agency(ies).
- ☒ Enforcement is conducted by both local *and* state agencies.

b. The following items concern penalties imposed for all violations of state youth and young adult access to tobacco laws by LOCAL AND/OR STATE LAW ENFORCEMENT AGENCIES (this does not include enforcement of local laws or federal youth and young adult tobacco access laws). Please fill in the number requested. If state law does not allow for an item, please mark "NA" (not applicable). If a response for an item is unknown, please mark "UNK." The chart must be filled in completely.

PENALTY	OWNERS	CLERKS	TOTAL
Number of <u>citations issued</u>	588	N/A	588
Number of <u>finest assessed</u>	172	N/A	172
Number of <u>permits/licenses suspended</u>	N/A		N/A
Number of <u>permits/licenses revoked</u>	N/A		N/A
Other (<i>Please describe.</i>)	N/A	N/A	N/A

c. Are citations or warnings issued to retailers or clerks who sell tobacco to minors for inspections that are part of the Synar survey?

- ☐ Yes ☒ No

If “Yes” to 5c, please describe the state’s procedure for minimizing risk of bias to the survey results from retailers alerting each other to the presence of the survey teams:

d. Which one of the following best describes the level of enforcement of state youth and young adult access to tobacco laws carried out in your state? (Check one category only.)

- ☐ Enforcement is conducted only at those outlets randomly selected for the Synar survey.
- ☐ Enforcement is conducted only at a subset of outlets not randomly selected for the Synar survey.
- ☒ Enforcement is conducted at a combination of outlets randomly selected for the Synar survey and outlets not randomly selected for the Synar survey.

e. Did every tobacco outlet in the state receive at least one compliance check that included enforcement of the state youth and young adult tobacco access law(s) in the last year?

- ☐ Yes ☒ No

f. What additional activities are conducted in your state to support enforcement and compliance with state youth and young adult tobacco access law(s)? (Check all that apply and briefly describe each activity in the text boxes below each activity.)

- ☒ Merchant education and/or training

- Provide Tennessee Tobacco Retailer Education Guide to retail outlets
 - Local businesses display required signage prohibiting the sale of tobacco or smoking paraphernalia to persons less than 21 years of age
 - Increase the practice of retailers checking IDs prior to the sale of tobacco products.
 - Provide age verification materials to tobacco retailers promoting identification checks

- ☒ Incentives for merchants who are in compliance (e.g., nonenforcement compliance checks in which compliant retailers are given positive reinforcement and noncompliant retailers are warned about youth and young adult access laws)

- Recognize compliant tobacco retailers by providing them with a thank you letter and promoting them via various media outlets as appropriate
 - Gather tobacco retailer compliance data on compliant tobacco retailers and disseminate this information to relevant stakeholders

- Conduct nonenforcement tobacco retailer compliance checks.
- Provide retailers with community scan results.
- Provide recognition to retailers who pass all compliance checks within a calendar year.

☒ Community education regarding youth and young adult access laws

- Increase skills of youth and adult coalition members to develop and implement tobacco prevention strategies
- Advocate for allowing local municipalities to regulate smoking on government-owned property (e.g., local health department campuses)
- Advocate for local ordinances designating smoke and/ or tobacco-free parks, playgrounds, ball fields, and/ or greenways
- Trained parents and community members on tobacco and vape usage through Hidden in Plain Sight Room
- Develop peer-led education campaigns using events and activities created by the youth coalition.
- Educate the community on current laws regarding the sale of vaping, CBD, hemp, etc. sold at convenience stores, vape stores, etc.
- Provide information about tobacco laws, consequences & proposed policy change in local community meetings (i.e., at monthly coalition meetings and when coalition staff attends other organizations' meetings). Communicate consequences of tobacco use and treatment resources through media, website, and focus groups with youth.

☒ Media use to publicize compliance inspection results

- Utilize social media to provide data and information such as local tobacco retailer compliance rates, current tobacco trends, and resources to prevent and reduce use, including 1-800-QUIT-Now, etc.
- Provide retail sales and student use data collected through student surveys and community scans through a website and other electronic outlets.
- Review the quarterly Dept. of Agriculture Tobacco Enforcement Summary and give positive recognition via social media to retailers who did NOT sell to minors.

☒ Community mobilization to increase support for retailer compliance with youth and young adult access laws

- Provide presentations to organizations and civic groups on sale and use data collected through student surveys and community retail scans.
- Train community scanners to observe sales practices.

- Provide law enforcement with a sales hot spot list
- Increased the practice of enforcing existing no-smoking/tobacco policies for businesses and schools within the community.

☒ Other activities (*Please list.*) _____

The Tennessee Department of Agriculture, Consumer and Industry Services, Food & Dairy Section, is responsible for inspecting retail establishments that sell food to ensure compliance with state laws and regulations related to food storage, facility sanitation and safety. After the inspector confirms the establishment is currently selling tobacco products, he will proceed with the tobacco compliance requirements. The requirements include the posted tobacco sign which must be 93 ½ square inches in size, tobacco products in their original sealed packages placed correctly, no illegal underage tobacco sales to youth, and vending machines that are supervised or locked.

At the time of the initial inspection, the inspectors discuss tobacco laws with the manager/owner. A tobacco sign is given to the store manager and the sign requirements are explained. The sign must be posted at the point of sale and state the following. **STATE LAW STRICTLY PROHIBITS THE SALE OF TOBACCO PRODUCTS, VAPOR PRODUCTS, OR SMOKING PARAPHERNALIA TO PERSONS UNDER THE AGE OF TWENTY-ONE (21) YEARS. PROOF OF AGE MAY BE REQUIRED.**

New businesses are required to be inspected and permitted before the establishment opens if they plan to sell perishable goods. Any violations are noted on the inspection sheet and required corrections are reviewed. Any tobacco product for retail sale not in its original sealed package will be removed immediately. If the store continues to have repeat violations, civil penalties will be enforced against the store.

Toll-free Complaint Line: The Tennessee Department of Agriculture provides a toll-free number (1-800-628-2631) for consumers to report establishments selling tobacco products to underage individuals and/or selling single cigarettes. Upon receiving a complaint, a request is given to the tobacco inspector to conduct a tobacco compliance check. If the complaint was for selling loose cigarettes, the youth will attempt to purchase a single cigarette.

Subsequently, a letter discussing the nature of the complaint will be sent to the retailer. Included with this letter will be a copy of the Tennessee Prevention of Youth Access to Tobacco and Vapor Products Law, a Tobacco Sign and a letter stating the requirements for posting this sign. Also included is a Tennessee Retailer's Education Guide.

SYNAR SURVEY METHODS AND RESULTS

The following questions pertain to the survey methodology and results of the Synar survey used by the state to meet the requirements of the Synar Regulation in FFY 2022 (see 42 U.S.C. 300x-26 and 45 C.F.R. 96.130).

6. Has the sampling methodology changed from the previous year?

☐ Yes ☒ No

The state is required to have an approved up-to-date description of the Synar sampling methodology on file with CSAP. Please submit a copy of your Synar Survey Sampling Methodology (Appendix B). If the sampling methodology changed from the previous reporting year, these changes must be reflected in the methodology submitted.

a. If yes, describe how and when this change was communicated to SAMHSA

7. Please answer the following questions regarding the state's annual random, unannounced inspections of tobacco outlets (see 45 C.F.R. 96.130(d)(2)).

a. Did the state use the optional Synar Survey Estimation System (SSES) to analyze the Synar survey data?

☒ Yes ☐ No

If Yes, upload a copy of SSES tables 1–8 (in Excel) to WebBGAS. Then go to Question 8. If No, continue to Question 7b.

b. Report the weighted and unweighted Retailer Violation Rate (RVR) estimates, the standard error, accuracy rate (number of eligible outlets divided by the total number of sampled outlets), and completion rate (number of eligible outlets inspected divided by the total number of eligible outlets).

Unweighted RVR 4.6%

Weighted RVR 4.7%

Standard error (s.e.) of the (weighted) RVR 1.8%

Fill in the blanks to calculate the right limit of the right-sided 95% confidence interval.

	+	(1.645	×)	=	
RVR Estimate	plus	(1.645	times	Standard Error)	equals	Right Limit
Accuracy rate						<u>95.9%</u>
Completion rate						<u>98.9%</u>

c. **Fill out Form 1 in Appendix A (Forms 1–5).** *(Required regardless of the sample design.)*

d. **How were the (weighted) RVR estimate and its standard error obtained?**
(Check the one that applies.)

☐ Form 2 (Optional) in Appendix A (Forms 1–5) *(Attach completed Form 2.)*

☐ Other *(Please specify. Provide formulas and calculations or attach and explain the program code and output with description of all variable names.)*

e. **If stratification was used, did any strata in the sample contain only one outlet or cluster this year?**

☐ Yes ☐ No ☐ No stratification

If Yes, explain how this situation was dealt with in variance estimation.

f. **Was a cluster sample design used?**

☐ Yes ☐ No

If Yes, fill out and attach Form 3 in Appendix A (Forms 1–5), and answer the following question.

If No, go to Question 7g.

Were any certainty primary sampling units selected this year?

☐ Yes ☐ No

If Yes, explain how the certainty clusters were dealt with in variance estimation.

g. **Report the following outlet sample sizes for the Synar survey.**

	Sample Size
Effective sample size (sample size needed to meet the SAMHSA precision requirement assuming simple random sampling)	
Target sample size (the product of the effective sample size and the design effect)	
Original sample size (inflated sample size of the target sample to counter the sample attrition due to ineligibility and noncompletion)	
Eligible sample size (number of outlets found to be eligible in the sample)	
Final sample size (number of eligible outlets in the sample for which an inspection was completed)	

h. **Fill out Form 4 in Appendix A (Forms 1–5).**

8. Did the state's Synar survey use a list frame?

☒ Yes ☐ No

If Yes, answer the following questions about its coverage.

a. The calendar year of the latest Sampling frame coverage study: 2022

b. Percent coverage from the latest Sampling frame coverage study: 77.5%

c. Was a new study conducted in this reporting period?

☒ Yes ☐ No

If Yes, please complete Appendix D (List Sampling Frame Coverage Study) and submit it with the Annual Synar Report.

d. The calendar year of the next coverage study planned: As required.

9. Has the Synar survey inspection protocol changed from the previous year?

☐ Yes ☒ No

The state is required to have an approved up-to-date description of the Synar inspection protocol on file with CSAP. Please submit a copy of your Synar Survey Inspection Protocol (Appendix C). If the inspection protocol changed from the previous year, these changes must be reflected in the protocol submitted.

a. If Yes, describe how and when this change was communicated to SAMHSA

b. Provide the inspection period: From 03/03/2022 to 8/31/2022
MM/DD/YY MM/DD/YY

c. Provide the number of youth and young adult inspectors used in the current inspection year:

NOTE: If the state uses SSES, please ensure that the number reported in 9b matches that reported in SSES Table 4, or explain any difference.

d. Fill out and attach Form 5 in Appendix A (Forms 1–5). (Not required if the state used SSES to analyze the Synar survey data.)

SECTION II: FFY 2023 (Intended Use):

Public Law 42 U.S.C. 300x-26 of the Public Health Service Act and 45 C.F.R. 96.130 (e) (4, 5) require that the states provide information on future plans to ensure compliance with the Synar requirements to reduce youth and young adult tobacco access.

1. In the upcoming year, does the state anticipate any changes in:

Synar sampling methodology ☐ Yes ☒ No

Synar inspection protocol ☐ Yes ☒ No

If changes are made in either the Synar sampling methodology or the Synar inspection protocol, the state is required to obtain approval from CSAP prior to implementation of the change and file an updated Synar Survey Sampling Methodology (Appendix B) or an updated Synar Survey Inspection Protocol (Appendix C), as appropriate.

2. Please describe the state's plans to maintain and/or reduce the target rate for Synar inspections to be completed in FFY 2023. Include a brief description of plans for law enforcement efforts to enforce youth and young adult tobacco access laws, activities that support law enforcement efforts to enforce youth and young adult tobacco access laws, and any anticipated changes in youth and young adult tobacco access legislation or regulation in the state.

TDMHSAS contracts with community coalitions. Each coalition is required to develop a comprehensive community prevention plan related to youth tobacco prevention. Coalitions have developed strategies that best meet the unique needs in their community based on a thorough assessment. Strategies adopted by coalitions involve law enforcement, retail outlets, and parents to reduce both retail and social access to tobacco products. Implementation of rewards and reminder strategies, health fact information dissemination, media campaigns and “lock/ secure your tobacco” products are just a few examples of community-based efforts.

The Tennessee Department of Agriculture, Consumer and Industry Services, Food & Dairy Section, is committed to reducing the accessibility of tobacco products to minors by continuously educating the store managers of the requirements of the tobacco laws, and ensuring they're implemented. Inspectors will inform retailers of any changes in the laws and will advise merchants to implement these changes. We will continue to ensure tobacco products are sold in their original packages and verify proper tobacco signage. Civil penalties will be enforced for repeat violators.

The TDA, Food & Dairy Section plans to continue enforcing the Prevention of Youth Access to Tobacco laws by conducting tobacco inspections throughout next year. Establishments that are non-compliant will be inspected more frequently until they are in compliance. Retailers will receive an outcome letter with the inspection results. The outcome letters address the youth access tobacco laws and the civil penalties that may be imposed by the Department of Agriculture for repeat violators. Enforcement strategies that incorporate year round inspections, re-inspections for violators, aggressive assessment of penalties, and merchant education will help deter potential violators. Establishments in violation during the Synar survey are currently being inspected in our tobacco enforcement program. Violators will be held accountable for their actions. TDA's toll-free telephone number will continue to be available to consumers so they may report establishments sell tobacco to minors and/or selling single cigarettes.

3. Describe any challenges the state faces in complying with the Synar regulation. *(Check all that apply and describe each challenge in the text box below it.)*

- ☐ Limited resources for law enforcement of youth and young adult access laws

- ☐ Limited resources for activities to support enforcement and compliance with youth and young adult tobacco access laws

- ☐ Limitations in the state youth and young adult tobacco access laws

- ☐ Limited public support for enforcement of youth and young adult tobacco access laws

- ☒ Limitations on completeness/accuracy of list of tobacco outlets

The Tennessee Department of Agriculture deals with challenges since it is not the licensing department for tobacco sells. There are many small tobacco/vape outlets who are not licensed by the Food & Dairy Division or the Weights & Measure Division, by not selling food or gas. Most non-licensed outlets are placed in our system while inspectors are out in route to another inspection. Meaning many of Tennessee's tobacco outlets are not accounted for but we are working tirelessly with our inspectors to document any new stores that open and input those in our system for inspections. At this time, no assistance is needed.

- ☐ Limited expertise in survey methodology

- ☐ Laws/regulations limiting the use of minors in tobacco inspections

- ☒ Difficulties recruiting youth and young adult inspectors

The Tennessee Department of Agriculture deals with challenges this year on the recruitment of youth inspectors because of the ongoing Covid-19 pandemic. Many parents have hesitated to allow their children (our youth inspectors) to work. We will continue to attempt to recruit our youth inspectors, though now we are having better outcome with youth inspectors that are 18 and 19. Along with the pandemic, the increase crime rate in cities have left parents hesitant to allow their children to partake in our program. At this time, no assistance is needed.

- ☐ Issues regarding the balance of inspections conducted by youth inspectors age 15

and under

- ☒ Issues regarding the balance of inspections conducted by one gender of youth and young adult inspectors

The Tennessee Department of Agriculture deals with challenges regarding the age and gender balances of the youth inspectors. We will continue to attempt to hire additional youth to address this challenge and look for new resources for youth availability in our program. At this time, no technical assistance is needed.

- ☐ Geographic, demographic, and logistical considerations in conducting inspections

- ☐ Cultural factors (e.g., language barriers, young people purchasing for their elders)

- ☐ Issues regarding sources of tobacco under tribal jurisdiction

- ☒ Other challenges (*Please list.*)_____

The Tennessee Department of Agriculture has faced many challenges with the ongoing Covid-19 Pandemic. Many counties are still slow in the reopening process and some still not reopening entirely from this ongoing pandemic. Inspections must take into consideration the safety of Tennessean's and of our inspectors. Many businesses are facing extreme difficulty staying open and running at normal operational hours of business in rural areas. Many have also been impacted by natural disasters in the last few years. Many can not keep their doors open due to inflation, and lack of employees. Along with businesses having issues we are still lacking the recruitment of more youth inspectors and tobacco inspectors. We continue to navigate these challenges carefully and at this time no assistance is needed.

APPENDIX A: FORMS 1–5

FORM 1 (Required for all states not using the Synar Survey Estimation System (SSES) to analyze the Synar Survey data)

Complete Form 1 to report sampling frame and sample information and to calculate the unweighted retailer violation rate (RVR) using results from the current year’s Synar survey inspections.

Instructions for Completing Form 1: In the top right-hand corner of the form, provide the state name and reporting federal fiscal year (FFY 2023). Provide the remaining information by stratum if stratification was used. Make copies of the form if additional rows are needed to list all the strata.

Column 1: *If stratification was used:*

1(a) Sequentially number each row.

1(b) Write in the name of each stratum. All strata in the state must be listed.

If no stratification was used:

1(a) Leave blank.

1(b) Write “state” in the first row (indicates that the whole state is a single stratum).

Note for unstratified samples: For Columns 2–5, wherever the instruction refers to “each stratum,” report the specified information for the state as a whole.

Column 2: 2(a) Report the number of over-the-counter (OTC) outlets in the sampling frame in each stratum.
2(b) Report the number of vending machine (VM) outlets in the sampling frame in each stratum.
2(c) Report the combined total of OTC and VM outlets in the sampling frame in each stratum.

Column 3: 3(a) Report the estimated number of eligible OTC outlets in the OTC outlet population in each stratum.
3(b) Report the estimated number of eligible VM outlets in the VM outlet population in each stratum.
3(c) Report the combined total estimated number of eligible OTC and VM outlets in the total outlet population in each stratum.

The estimates for Column 3 can be obtained from the Synar survey sample as the weighted sum of eligible outlets by outlet type.

Column 4: 4(a) Report the number of eligible OTC outlets for which an inspection was completed, for each stratum.
4(b) Report the numbers of eligible VM outlets for which an inspection was completed, for each stratum.
4(c) Report the combined total of eligible OTC and VM outlets for which an inspection was completed, for each stratum.

Column 5: 5(a) Report the number of OTC outlets found in violation of the law as a result of completed inspections, for each stratum.
5(b) Report the number of VM outlets found in violation of the law as a result of completed inspections, for each stratum.
5(c) Report the combined total of OTC and VM outlets found in violation of the law as a result of completed inspections, for each stratum.

Totals: For each subcolumn (a–c) in Columns 2–5, provide totals for the state as a whole in the last row of the table. These numbers will be the sum of the numbers in each row for the respective column.

FORM 1 (Required for all states not using the Synar Survey Estimation System [SSES] to analyze the Synar Survey data.)

[illegible]

RECORD COLUMN TOTALS ON LAST LINE (LAST PAGE ONLY IF MULTIPLE PAGES ARE NEEDED).

FORM 2 (Optional)**Appropriate for stratified simple or systematic random sampling designs.**

Complete Form 2 to calculate the weighted RVR. This table (in Excel form) is designed to calculate the weighted RVR for stratified simple or systematic random sampling designs, accounting for ineligible outlets and noncomplete inspections encountered during the annual Synar survey.

Instructions for Completing Form 2: In the top right-hand corner of the form, provide the state name and reporting federal fiscal year (FFY 2023).

- Column 1: Write in the name of each stratum into which the sample was divided. These should match the strata reported in Column 1(b) of Form 1.
- Column 2: Report the number of outlets in the sampling frame in each stratum. These numbers should match the numbers reported for the respective strata in Column 2(c) of Form 1.
- Column 3: Report the original sample size (the number of outlets originally selected, *including* substitutes or replacements) for each stratum.
- Column 4: Report the number of sample outlets in each stratum that were found to be eligible during the inspections. Note that this number must be less than or equal to the number reported in Column 3 for the respective strata.
- Column 5: Report the number of eligible outlets in each stratum for which an inspection was completed. Note that this number must be less than or equal to the number reported in Column 4. These numbers should match the numbers reported in Column 4(c) of Form 1 for the respective strata.
- Column 6: Report the number of eligible outlets inspected in each stratum that were found in violation. These numbers should match the numbers reported in Column 5(c) of Form 1 for the stratum.
- Column 7: Form 2 (in Excel form) will automatically calculate the stratum RVR for each stratum in this column. This is calculated by dividing the number of inspected eligible outlets found in violation (Column 6) by the number of inspected eligible outlets (Column 5). The state unweighted RVR will be shown in the Total row of Column 7.
- Column 8: Form 2 (in Excel form) will automatically calculate the estimated number of eligible outlets in the population for each stratum. This calculation is made by multiplying the number of outlets in the sampling frame (Column 2) times the number of eligible outlets (Column 4) divided by the original sample size (Column 3). Note that these numbers will be less than or equal to the numbers in Column 2.
- Column 9: Form 2 (in Excel form) will automatically calculate the relative stratum weight by dividing the estimated number of eligible outlets in the population for each stratum in Column 8 by the Total of the values in Column 8.
- Column 10: Form 2 (in Excel form) will automatically calculate each stratum's contribution to the state weighted RVR by multiplying the stratum RVR (Column 7) by the relative stratum weight (Column 9). The weighted RVR for the state will be shown in the Total row of Column 10.
- Column 11: Form 2 (in Excel form) automatically calculates the standard error of each stratum's RVR (Column 7). The standard error for the state weighted RVR will be shown in the Total row of Column 11.
- TOTAL: For Columns 2–6, Form 2 (in Excel form) provides totals for the state as a whole in the last row of the table. For Columns 7–11, it calculates the respective statistic for the state as a whole.

FORM 2 (Optional) Appropriate for stratified simple or systematic random sampling designs.

Calculation of Weighted Retailer Violation Rate										
										State: _____
										FFY: 2023
(1) Stratum Name	(2) N Number of Outlets in Sampling Frame	(3) n Original Sample Size	(4) n1 Number of Sample Outlets Found Eligible	(5) n2 Number of Outlets Inspected	(6) x Number of Outlets Found in Violation	(7) p=x/n2 Stratum Retailer Violation Rate	(8) N'=N(n1/n) Estimated Number of Eligible Outlets in Population	(9) w=N'/Total Column 8 Relative Stratum Weight	(10) pw Stratum Contribution to State Weighted RVR	(11) s.e. Standard Error of Stratum RVR
Total										

- N - number of outlets in sampling frame
 n - original sample size (number of outlets in the original sample)
 n1 - number of sample outlets that were found to be eligible
 n2 - number of eligible outlets that were inspected
 x - number of inspected outlets that were found in violation
 p - stratum retailer violation rate ($p=x/n2$)
 N' - estimated number of eligible outlets in population ($N'=N*n1/n$)
 w - relative stratum weight ($w=N'/\text{Total Column 8}$)
 pw - stratum contribution to the weighted RVR
 s.e. - standard error of the stratum RVR

FORM 3 (Required when a cluster design is used for all states not using the Synar Survey Estimation System [SSES] to analyze the Synar survey data.)

Complete Form 3 to report information about primary sampling units when a cluster design was used for the Synar survey.

Instructions for Completing Form 3: In the top right-hand corner of the form, provide the state name and reporting federal fiscal year (FFY 2023).

Provide information by stratum if stratification was used. Make copies of the form if additional rows are needed to list all the strata.

Column 1: Sequentially number each row.

Column 2: *If stratification was used:* Write in the name of stratum. All strata in the state must be listed.

If no stratification was used: Write “state” in the first row to indicate that the whole state constitutes a single stratum.

Column 3: Report the number of primary sampling units (PSUs) (i.e., first-stage clusters) created for each stratum.

Column 4: Report the number of PSUs selected in the original sample for each stratum.

Column 5: Report the number of PSUs in the final sample for each stratum.

TOTALS: For Columns 3–5, provide totals for the state as a whole in the last row of the table.

Summary of Clusters Created and Sampled				
State: _____				
FFY: 2023				
(1) Row #	(2) Stratum Name	(3) Number of PSUs Created	(4) Number of PSUs Selected	(5) Number of PSUs in the Final Sample
Total				

FORM 4 (Required for all states not using the Synar Survey Estimation System [SSES] to analyze the Synar Survey data)

Complete Form 4 to provide detailed tallies of ineligible sample outlets by reasons for ineligibility and detailed tallies of eligible sample outlets with noncomplete inspections by reasons for noncompletion.

Instructions for Completing Form 4: In the top right-hand corner of the form, provide the state name and reporting federal fiscal year (FFY 2023).

Column 1(a): Enter the number of sample outlets found ineligible for inspection by reason for ineligibility. Provide the total number of ineligible outlets in the row marked “Total.”

Column 2(a): Enter the number of eligible sample outlets with noncomplete inspections by reason for noncompletion. Provide the total number of eligible outlets with noncomplete inspections in the row marked “Total.”

Inspection Tallies by Reason of Ineligibility or Noncompletion State: _____ FFY: 2023 _____			
(1) INELIGIBLE		(2) ELIGIBLE	
Reason for Ineligibility	(a) Counts	Reason for Noncompletion	(a) Counts
Out of business		In operation but closed at time of visit	
Does not sell tobacco products		Unsafe to access	
Inaccessible by youth or young adult		Presence of police	
Private club or private residence		Youth or young adult inspector knows salesperson	
Temporary closure		Moved to new location	
Unlocatable		Drive-thru only/youth or young adult inspector has no driver's license	
Wholesale only/Carton sale only		Tobacco out of stock	
Vending machine broken		Ran out of time	
Duplicate		Other noncompletion reason(s) (<i>Describe.</i>)	
Other ineligibility reason(s) (<i>Describe.</i>)			
Total		Total	

FORM 5 (Required for all states not using the Synar Survey Estimation System [SSES] to analyze the Synar survey data)

Complete Form 5 to show the distribution of outlet inspection results by age and gender of the youth and young adult inspectors.

Instructions for Completing Form 5: In the top right-hand corner of the form, provide the state name and reporting federal fiscal year (FFY 2023).

Column 1: Enter the number of attempted buys by youth and young adult inspector age and gender.

Column 2: Enter the number of successful buys by youth and young adult inspector age and gender.

If the inspectors are age eligible but the gender of the inspector is unknown, include those inspections in the “Other” row. Calculate subtotals for males and females in rows marked “Male Subtotal” and “Female Subtotal.” Sum subtotals for Male, Female, and Other and record in the bottom row marked “Total.” Verify that the total of attempted buys and successful buys equals the total for Column 4(c) and Column 5(c), respectively, on Form 1. If the totals do not match, please explain any discrepancies.

Synar Survey Inspector Characteristics		
		State: _____
		FFY: 2023
	(1) Attempted Buys	(2) Successful Buys
Male		
15 years		
16 years		
17 years		
18 years		
19 years		
20 years		
Male Subtotal		
Female		
15 years		
16 years		
17 years		
18 years		
19 years		
20 years		
Female Subtotal		
Other		
Total		

APPENDIXES B & C: FORMS

Instructions

Appendix B (Sampling Design) and Appendix C (Inspection Protocol) are to reflect the state's CSAP-approved sampling design and inspection protocol. These appendixes, therefore, should generally describe the design and protocol and, with the exception of Question #10 of Appendix B, are not to be modified with year-specific information. Please note that any changes to either appendix must receive CSAP's advance, written approval. To facilitate the state's completion of this section, simply cut and paste the previously approved sampling design (Appendix B) and inspection protocol (Appendix C) and respond to Question #10 of Appendix B to provide the requested information about sample size calculations for the Synar survey conducted in FFY 2022.

APPENDIX B: SYNAR SURVEY SAMPLING METHODOLOGY

State: TN
FFY: 2023

1. What type of sampling frame is used?

- ☒ List frame (*Go to Question 2.*)
☐ Area frame (*Go to Question 3.*)
☐ List-assisted area frame (*Go to Question 2.*)

2. List all sources of the list frame. Indicate the type of source from the list below. Provide a brief description of the frame source. Explain how the lists are updated (method), including how new outlets are identified and added to the frame. In addition, explain how often the lists are updated (cycle). (*After completing this question, go to Question 4.*)

Use the corresponding number to indicate Type of Source in the table below.

- 1 – Statewide commercial business list 4 – Statewide retail license/permit list
2 – Local commercial business list 5 – Statewide liquor license/permit list
3 – Statewide tobacco license/permit list 6 – Other

Name of Frame Source	Type of Source	Description	Updating Method and Cycle
HealthSpace USA	4	<p>The TN Department of Agriculture (TDA) utilizes the AGILE application in Health/Space USA Inc. The Retail Food Store Inspectors capture information during inspections of establishments that sell tobacco products and are accessible to minors. This includes nationally owned convenience stores, grocery claims, locally owned stores and tobacco shops.</p> <p>The TN Department of Health (TDH) environmental inspect restaurants, hotels, bowling alleys and game rooms. TDA request a list from TDH of establishments that sell tobacco products and are accessible to minors. This information is added to HealthSpace.</p>	<p>TDA inspectors routinely inspect establishments once or twice yearly and the system is updated. New business are added at the time an owner notifies our department to apply for a Retail Food Store permit.</p> <p>TDH environmentalist provide a yearly list of establishments that sell tobacco and are accessible to minors. The information is entered into HealthSpace. Our Tobacco Compliance Inspectors conduct state tobacco inspections yearly by county using a county list. Most TDH and TDA establishments missing from the list are inspected and added to HealthSpace as needed.</p>

3. If an area frame is used, describe how area sampling units are defined and formed.

a. Is any area left out in the formation of the area frame?

☐ Yes ☐ No

If Yes, what percentage of the state's population is not covered by the area frame?

_____%

4. Federal regulation requires that vending machines be inspected as part of the Synar survey. Are vending machines included in the Synar survey?

☒ Yes ☐ No

If No, please indicate the reason(s) they are not included in the Synar survey. Please check all that apply.

☐ State law bans vending machines.

☒ State law bans vending machines from locations accessible to youth and young adults.

☐ State has a contract with the FDA and is actively enforcing the vending machine requirements of the Family Smoking Prevention and Tobacco Control Act.

☐ Other (Please describe.) _____

If Yes, please indicate how likely it is that vending machines will be sampled.

☐ Vending machines are sampled separately to ensure vending machines are included in the sample

☒ Vending machines are sampled together with over the counter outlets, so it is possible that no vending machines were sampled, however they are included in the sampling frame and have a non-zero probability of selection

☐ Other reasons (Please describe.) _____

5. Which category below best describes the sample design? (Check only one.)

☐ **Census** (STOP HERE: Appendix B is complete.)

Unstratified statewide sample:

☐ Simple random sample (Go to Question 9.)

☐ Systematic random sample (Go to Question 6.)

☐ Single-stage cluster sample (Go to Question 8.)

☐ Multistage cluster sample (Go to Question 8.)

Stratified sample:

☒ Simple random sample (Go to Question 7.)

☐ Systematic random sample (Go to Question 6.)

☐ Single-stage cluster sample (Go to Question 7.)

☐ Multistage cluster sample (Go to Question 7.)

☐ **Other** (Please describe and go to Question 9.) _____

- 6. Describe the systematic sampling methods.** (After completing Question 6, go to Question 7 if stratification is used. Otherwise go to Question 9.)

- 7. Provide the following information about stratification.**

- a. Provide a full description of the strata that are created.**

Simple random sampling for over-the-counter establishments is used to draw Tennessee's Synar sample. Sampling is done within stratum, which ensures adequate geographic representation of the State's tobacco outlets.

Stratum ID	Universe	Sample
301 (West TN)	786	18
302 (Middle TN)	1965	22
305 (East TN)	2145	34
309 (Shelby County)	828	19
310 (Davidson County)	594	12
311 (Knox County)	370	6
Totals	6,688	111

Excel's random number generator was used to assign random establishment within stratum.

Six (6) over-the-counter stratum are created representing West, Middle and East Tennessee. Davidson, Knox and Shelby Counties contain the major metropolitan cities of Nashville, Knoxville and Memphis, respectively. There are a total of six (6) strata from which to collect data.

- b. Is clustering used within the stratified sample?**

☐ **Yes** (Go to Question 8.)

☒ **No** (Go to Question 9.)

- 8. Provide the following information about clustering.**

- a. Provide a full description of how clusters are formed.** (If multistage clusters are used, give definitions of clusters at each stage.)

- b. Specify the sampling method (simple random, systematic, or probability proportional to size sampling) for each stage of sampling and describe how the method(s) is (are) implemented.

9. Provide the following information about determining the Synar Sample.

- a. Was the Synar Survey Estimation System (SSES) used to calculate the sample size?

☒ Yes (Respond to part b.)

☐ No (Respond to part c and Question 10c.)

- b. SSES Sample Size Calculator used?

☐ State Level (Respond to Question 10a.)

☒ Stratum Level (Respond to Question 10a and 10b.)

- c. Provide the formulas for determining the effective, target, and original outlet sample sizes.

The Synar sample size is calculated assuming a 50 percent noncompliance rate in an effort to provide a safety margin in the sample size.

The formula follows:

$$n_e = \frac{1}{\left(\frac{(0.0182)^2}{P(1-P)} + \frac{1}{N}\right)}$$

Where P is an assured RVR of 50 % and N is the total number of outlets in the sampling frame.

The target sample size is determined by multiplying the effective sample size by the design effect from the previous year's survey ($n_t = dn_e$).

The original sample size is determined by inflating the target sample size by the expected eligibility rate (r_l) and the expected completion rate (r_c), where then, is the eligibility (also known as accuracy) rate from the previous year's survey and is the completion rate from the previous year's survey. The original sample size can be written as:

$$n_o = \frac{n_t}{r_l r_c}$$

These calculations are used to determine the State 's (Tennessee's) six (6) over – the counter strata sample sizes.

10. Provide the following information about sample size calculations for the Synar survey conducted in FFY 2022.

- a. If the state uses the sample size formulas embedded in the SSES Sample Size Calculator to calculate the state level sample size, please provide the following information:**

Inputs for Effective Sample Size:

RVR: 50%

Frame Size: 6688

Input for Target Sample Size:

Design Effect: 1.0

Inputs for Original Sample Size:

Safety Margin: 50

Accuracy (Eligibility) Rate: 95.9%

Completion Rate: 98.9%

- b. If the state uses the sample size formulas embedded in the SSES Sample Size Calculator to calculate the stratum level sample sizes, please provide the stratum level information:**

Stratum 301 – 786 (West TN)

Stratum 302 – 1,965 (Middle TN)

Stratum 305 – 2,145 (East TN)

Stratum 309 – 828 (Shelby County – Contains Memphis)

Stratum 310 – 594 (Davidson County – Contains Nashville)

Stratum 311 – 370 (Knox County – Contains Knoxville)

- c. If the state does not use the sample size formulas embedded in the SSES Sample Size Calculator, please provide all inputs required to calculate the effective, target, and original sample sizes as indicated in Question 9.**

--

APPENDIX C: SYNAR SURVEY INSPECTION PROTOCOL SUMMARY

State: TN
FFY: 2023

Note: Upload to WebBGAS a copy of the Synar inspection form under the heading “Synar Inspection Form” and a copy of the protocol used to train inspection teams on conducting and reporting the results of the Synar inspections under the heading “Synar Inspection Protocol.”

1. How does the state Synar survey protocol address the following?

a. Consummated buy attempts?

- ☐ Required
☐ Permitted under specified circumstances (Describe:)
☒ Not permitted

b. Youth and young adult inspectors to carry ID?

- ☐ Required
☐ Permitted under specified circumstances (Describe:)
☒ Not permitted

c. Adult inspectors to enter the outlet?

- ☒ Required
☐ Permitted under specified circumstances (Describe:)
☐ Not permitted

d. Youth and young adult inspectors to be compensated?

- ☒ Required
☐ Permitted under specified circumstances (Describe:)
☐ Not permitted

2. Identify the agency(ies) or entity(ies) that actually conduct the random, unannounced Synar inspections of tobacco outlets. (Check all that apply.)

- ☐ Law enforcement agency(ies)
☒ State or local government agency(ies) other than law enforcement
☐ Private contractor(s)
☐ Other

List the agency name(s): Tennessee Department of Agriculture

3. Are Synar inspections combined with law enforcement efforts (i.e., do law enforcement representatives issue warnings or citations to retailers found in violation of the law at the time of the inspection?)?

☐ Always ☐ Usually ☐ Sometimes ☐ Rarely ☒ Never

4. Describe the type of tobacco products that are requested during Synar inspections.

- a. What type of tobacco products are requested during the inspection?

- ☒ Cigarettes
☒ Small Cigars
☒ Cigarillos
☒ Smokeless Tobacco
☒ Electronic Cigarettes/Electronic Nicotine Delivery Systems (ENDS)
☐ Other

- b. Describe the protocol for identifying what types of products and what brands of products are requested during an inspection.

During the annual Synar training, the inspectors are asked to discuss with their youth the type of tobacco product and the brand name of the product. During the youth training, the inspector and the minor will agree on the most popular type of tobacco product and brand name in their area. They request the same type of product and brand name, and also have a back-up plan in case the establishment does not have the specific product.

- 5a. Describe the methods used to recruit, select, and train adult supervisors.

All of our Synar inspectors currently conduct tobacco enforcement inspections year-round. They have been responsible for implementing the Synar program for the last six years. An annual inspector's statewide Synar training is held each spring presented by the Synar coordinator. Inspectors are given materials including a Synar Protocol, the random county list to be surveyed, an instructional guide and youth inspector's packets.

- 5b. Describe the methods used to recruit, select, and train youth and young adult inspectors.

After the adult inspectors are trained, they may recruit youths in their community to work with them or work with youth who are already assisting in the tobacco enforcement program. If necessary, the Synar coordinator has a list of contacts and will recruit the youth inspectors. During the youth training, the adult inspector explains the program to the youth and his parent and written parental consent is mandatory. A variety of scenarios are discussed to better prepare the youths for any questions they may be asked during the survey. Youth must answer truthfully and do not carry an ID with them. They are encouraged to keep the survey confidential. To ensure confidentiality of the minors, they're assigned a minor ID number for identification.

6. Are there specific legal or procedural requirements instituted by the state to address the issue of youth and young adult inspectors' immunity when conducting inspections?

- a. Legal

☒ Yes ☐ No

(If Yes, please describe.)

TCA § 39-17-1504

TCA § 39-17-1505

b. Procedural

☐ Yes ☒ No

(If Yes, please describe.)

7. Are there specific legal or procedural requirements instituted by the state to address the issue of the safety of youth and young adult inspectors during all aspects of the Synar inspection process?

a. Legal

☐ Yes ☒ No

(If Yes, please describe.)

b. Procedural

☒ Yes ☐ No

(If Yes, please describe.)

Inspectors are not required to conduct Synar or enforcement inspections in establishments that appear to be unsafe. During all inspections, adults are asked to enter the establishment a few seconds before the minor so they may view the surroundings. The inspector should terminate the inspection immediately if he believes the establishment poses a threat to himself and/or the minor.

8. Are there any other legal or procedural requirements the state has regarding how inspections are to be conducted (e.g., age of youth and young adult inspector, time of inspections, training that must occur)?

a. Legal

☒ Yes ☐ No

(If Yes, please describe.)

TCA, Section 50-5-109 states a birth certificate or other proof of age is required before any minor may be employed or continue to be employed. Chapter 5 Section 50-5-115 states a “minor must have a thirty *(30) minute unpaid break or meal period if scheduled to work six hours consecutively”.

TCA, Section 50-5-105 states a minor, “16 or 17 years of age enrolled in school, may not be employed during those hours when the minor is required to attend

classes and between the hours of ten p.m. and six a.m. Sunday through Thursday evenings preceding a school day”

b. Procedural

☒ **Yes** ☐ **No**

(If Yes, please describe.)

Minors must be between the ages of sixteen (16) and twenty (20) years old to participate in the Synar Program. Inspectors are required to meet with the parent and child to discuss the Synar protocol and answer any questions. The parent is provided with a packet explaining the program. Copies of the minor’s social security card, birth certificate, and school record or driver’s license are required along with other documents including the written parental consent form for those underage.

APPENDIX D: LIST SAMPLING FRAME COVERAGE STUDY

(LIST FRAME ONLY)

State: TN
FFY: 2023

1. Calendar year of the coverage study: 2021

2. a. Unweighted percent coverage found: 77.5%
b. Weighted percent coverage found: 77.5%
c. Number of outlets found through canvassing: 2,348
d. Number of outlets matched on the list frame: 89

3. a. Describe how areas were defined. (e.g., census tracts, counties, etc.)

Census tracts from the 2020 Population Census was sampled for urban and rural tracts. There were two thousand three hundred forty-eight (2,348) establishments open to the public found within the sampled areas. Within the two thousand three hundred forty-eight (2,348) establishments, eighty-nine (89) establishments sold tobacco products. Sixty-nine (69) of those eighty-nine (89) establishments were found on our list frame (Healthspace USA). The others were added. The coverage found was based on the 69 already on our list versus the 89 that sold tobacco.

b. Were any areas of the state excluded from sampling?

☐ Yes ☒ No

If Yes, please explain.

4. Please answer the following questions about the selection of canvassing areas.

a. Which category below best describes the sample design? (Check only one.)

☒ Census (Go to Question 6.)

Unstratified statewide sample:

- ☐ Simple random sample (Respond to Part b.)
☐ Systematic random sample (Respond to Part b.)
☐ Single-stage cluster sample (Respond to Parts b and d.)
☐ Multistage cluster sample (Respond to Parts b and d.)

Stratified sample:

- ☐ Simple random sample (Respond to Parts b and c.)
☐ Systematic random sample (Respond to Parts b and c.)
☐ Single-stage cluster sample (Respond to Parts b, c, and d.)
☐ Multistage cluster sample (Respond to Parts b, c, and d.)

☐ **Other** (Please describe and respond to Part b.) _____

b. Describe the sampling methods.

Sampling:

The same sampling methodology used for the 2015 Coverage Study was adopted for the 2022 study.

Total Sample Size = 20

Urban Sample Size = 12

Rural Sample Size = 8

The Urban and Rural Sample Populations consisted of tracts from the 2020 Population Census classified as Urban or Non-Urban. Each group was sampled independently of the other. Tracts from both groups were sorted in descending order according to population within the tract.

Tract Maps, by County, are located at:

http://www2.census.gov/geo/maps/dc10map/tract/st47_tn/c47001_anderson/DC10CT_C47001_001.pdf

Cumulative totals were calculated using the census tract population. Sampling intervals were determined by dividing the cumulative total (all tracts) of the respective group (urban and non-urban) by the sample size for the group. A random starting number was chosen for the group and the sampling interval was adjusted to account for the number.

Sample numbers (a number within the population) were then selected for the group based upon the random start number and sampling interval. Tracts from which the sample numbers resided were then selected as the sample units.

Example:

Tract	Population	Cumulative Pop
1	600	600
2	300	900
3	200	1100
4	100	1200

Sample = 3

Sampling Interval $1200/3 = 400$

Random Start = 51

Adjusted Sampling Interval = $400 - 51 = 349$

Sample 1 = $349 + 51 = 400$ (tract 1)

Sample 2 = $2 * (349) + 51 = 749$ (tract 2)

Sample 3 = $3 * (349) + 51 = 1098$ (tract 3)

The 20 census tracts are randomly selected from all census tracts in the state. The tracts were drawn on probability proportional to size, and drawn separately, urban and non-urban. Urban tracts were sampled at a higher rate in 2010 as well as this year due to low coverage shown in previous coverage studies.

The plan does include canvassing all outlets in the selected tracts that sell tobacco products.

The SAS program used was:

This program is designed to compute the fraction of establishments not on the list based on a simple random area sample of size n from a population of 1261 tracts when there are 7757 establishments on the list.

n: is the potential sample size for the simple random area sample (we allow it to vary)

m: is our guess of the expected number of missing establishments per tract (say 0.5)

sd_m: is our guess of the standard deviation of m (say 2)

p: is the estimated fraction of establishments NOT on the list given n , m , and sd_m .

ci_p: is the +/- for a 95% confidence interval for p .

```
data d;
input n;
sd_m = 2;
m = .5;
p = 1261*m/(1261*m + 7980);
ci_p = 2*(1261/sqrt(n))*sd_m/(7980 + 1261*m);

cards;
10
20
30
```

40
50
60
70
80
90
100

```
;proc print; id n; var p ci_p; run;
```

With $m = 0.5$ and $sd_m = 2$ the output is:

n	p	ci_p
10	0.073225	0.18525
20	0.073225	0.13099
30	0.073225	0.10695
40	0.073225	0.09262
50	0.073225	0.08284
60	0.073225	0.07563
70	0.073225	0.07002
80	0.073225	0.06549
90	0.073225	0.06175
100	0.073225	0.05858

This means that our assumptions imply that around 7.3% ($0.073225 * 100$) of establishments are missing from the list, and there is approximately a 95% chance that the estimate from a sample of size 20 will be under 20.4% ($7.3225 + 13.099$).

If you wanted, you could allocate the 20 proportionately to urban and non-urban tracts,

5 and 15.

Other numbers can be used for m sd_m and n .

c. Provide a full description of the strata that were created.

d. Provide a full description of how clusters were formed.

5. Were borders of the selected areas clearly identified at the time of canvassing?

☒ Yes ☐ No

6. Were all sampled areas visited by canvassing teams?

☒ Yes (*Go to Question 7.*) ☐ No (*Respond to Parts a and b.*)

a. Was the subset of areas randomly chosen?

☐ Yes ☐ No

b. Describe how the subsample of visited areas was drawn. Include the number of areas sampled and the number of areas canvassed.

7. Were field observers provided with a detailed map of the canvassing areas?

☒ Yes ☐ No

If No, describe the canvassing instructions given to the field observers.

8. Were field observers instructed to find all outlets in the assigned area?

☒ Yes ☐ No

If No, respond to Question 9.

If Yes, describe any instructions given to the field observers to ensure the entire area was canvassed, then go to Question 10.

Please canvass the outlined area on the maps provided:

1. Drive through each and every one of the streets within the assigned segment area. Visit all locations that are open to the public. Each location is to be recorded on the cover study inspection sheet and those who sell tobacco you will mark 'yes' on sells tobacco products.
2. In areas with large buildings or other types of complexes that are open to the public that have multiple locations, it may be necessary to throughout the entire complex to verify which firm sells tobacco products. (This applies to malls, recreational areas, campuses, etc.)
3. If a location is age restricted, please make sure the box 'yes' on the age restricted question in the inspection sheet. If a store appears to be unsafe to enter but appears to sell tobacco products, complete an inspection sheet but make sure to include that you did not enter to verify.

All inspection sheets must be emailed to: Tobacco.SalesToYouth@tn.gov and originals must be mailed to the office (Tennessee Department of Agriculture. PO Box 40627, Nashville TN 37204)

9. If a full canvassing was not conducted:

a. How many predetermined outlets were to be observed in each area? _____

b. What were the starting points for each area? _____

c. Were these starting points randomly chosen?

☐ Yes ☐ No

d. Describe the selection of the starting points.

e. Please describe the canvassing instructions given to the field observers, including predetermined routes.

10. Describe the process field observers used to determine if an outlet sold tobacco.

Inspectors (field canvassers) checked all firms opened to the public their assigned segment area and completed inspection sheets for all locations. Documenting those with age restrictions and those who sold tobacco products. If they could not see tobacco products they were requested to ask. If a firm was unsafe to enter but appeared to sell tobacco products the inspector will include that in that firm's inspection form. These firms will then be checked against the list frame and a follow up verification could be done if needed.

11. Please provide the state's definition of "matches" or "mismatches" to the Synar sampling frame? (i.e., address, business name, business license number, etc.)

A firm found during the coverage study was considered a match to our list frame when the stores, name, address, and/or geospatial location was the same.

12. Provide the calculation of the weighted percent coverage (if applicable).